

Notice of Allowability

Application No.

10/806,130

Examiner

Ashok B. Patel

Applicant(s)

EWING ET AL.

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 04/10/2006.
2. ☒ The allowed claim(s) is/are 6-38.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

DETAILED ACTION

1. Claims 6-38 are allowed. Claims 1-5 have been cancelled.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Justin Wagner on 05/08/2006.

Terminal Disclaimer

3. The terminal disclaimer filed on 03/06/2006 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent no. 5, 949, 974 has been reviewed and is accepted. The terminal disclaimer has been recorded.
4. The application has been amended as follows:
In the claims:
 - a. Claims 1-5 have been cancelled.
 - b. Claim 6. (Currently amended) A network power manager apparatus of the type useable in a computer network having a host system with a network power manager application adapted to issue network commands and communicate network commands over a network communications connect supporting IP communications, the network power manager apparatus comprising in combination:
a power supply housing;

a power manager agent application mounted in the power supply housing and being connectable to the network communications connection;

a plurality of power outlets mounted in the power supply housing; and

a plurality of intelligent power modules (IPMs) mounted in the power supply housing and connectable to said network communications connection and thereby being in IP communication with said network power manager application through said power manager agent application, each said intelligent power module being adapted to provide power from a power source to a corresponding power outlet among the plurality of power outlets and being in communication with said power manager agent application to provide power cycling on-off of said corresponding power outlet and at least one of power state sensing and load-sensing with respect to said corresponding power outlet in response to one or more commands, wherein each intelligent power module comprises a microprocessor connected by a power on/off device to independently control the power applied to said corresponding power outlet, and wherein said microprocessor is also connected by at least one among a voltage sensing device to independently sense the power state of said corresponding power outlet and a load sensing device to independently sense the load status of said corresponding power outlet.

c. Claim 8. (Currently amended) The network power manager apparatus of claim 6 wherein ~~each intelligent power module further comprises a microprocessor connected by~~ said voltage sensing device comprises an opto-isolator whereby the intelligent power module may independently sense the power state of said corresponding power outlet.

d. Claim 10. (Currently amended) The network power manager apparatus of claim 6 wherein ~~each of the intelligent power modules further comprises a microprocessor connected by~~ said load sensing device comprises a load sensor that independently senses the load status of the corresponding power outlet.

e. Claim 12. (Currently amended) The network power manager apparatus of claim 6 wherein ~~each of the intelligent power modules further comprises a~~

~~microprocessor in communication with said power on/off device comprises~~ a relay that ~~independently controls the power applied to the corresponding power outlet.~~

f. Claim 21. (Currently amended) A network power manager apparatus of the type useable in a computer network having a host system with a network power manager application adapted to issue network commands and communicate network commands over a network communications connection, the network power manger apparatus comprising in combination:

a power manager agent application connectable to the network communications connection;

a plurality of power outlets; and

a plurality of intelligent power modules (IPMs) connectable in communication with said network power manager application, each said intelligent power module comprising a microprocessor, and each said intelligent power module being adapted to provide power from a power source to a corresponding power outlet among the plurality of power outlets and being in communication with said power manager agent application to provide power cycling on-off of said corresponding power outlet and at least one of power-on sensing and load-sensing with respect to said corresponding power outlet in response to one or more commands.

g. Claim 22. (Currently amended) The network power manager apparatus of claim 21 further comprising a serial communications connection supported by ~~[[a]]~~ said microprocessor, said serial communications connection being adapted to connect each of the intelligent power modules to the network power manager application.

h. Claim 23. (Currently amended) The network power manager apparatus of claim 21 wherein ~~each intelligent power module further comprises a~~ said microprocessor is connected by an opto-isolator whereby the intelligent power module may independently sense the power-on status of said corresponding power outlet.

i. Claim 25. (Currently amended) The network power manager apparatus of claim 21 wherein ~~each of the intelligent power modules further comprises a~~ said microprocessor is connected by a load sensor that independently senses the load status of the corresponding power outlet.

j. Claim 27. (Currently amended) The network power manager apparatus of claim 21 wherein ~~each of the intelligent power modules further comprises a~~ said microprocessor is in communication with a relay that independently controls the power applied to the corresponding power outlet.

k. Claim 29. (Currently amended) The network power manager apparatus of claim 21 wherein ~~each intelligent power module further comprises: a~~ said microprocessor is in communication with:

a power on sensor that independently senses the power-on status of the corresponding power outlet;

a load sensor that independently senses the load status of the corresponding power outlet; and

a relay that independently controls the power applied to the corresponding power outlet.

l. Claim 30. (Currently amended) The network power manager apparatus of claim 21 wherein each intelligent power module further comprises: a power supply and clock generator connected to a load-sensor, a power on sensor, and a relay, said power supply and clock generator applying a series of alternating current (AC) voltage pulses synchronized to a source of AC power to the corresponding power outlet with an on/off switch, said load sensor being adapted to sense the presence of a series of AC current pulses that result if said on/off switch is closed; ~~[[a]]~~ said microprocessor ~~that~~ analyzes any AC current pulses detected by said load sensor to determine if they resulted from application of the AC voltage pulses; and each intelligent power module further comprises an input/output connection connected to said microprocessor that outputs an on/off status indication for said switch.

m. Claim 31. (Currently amended) The network power manager apparatus of claim 21 wherein each intelligent power module further comprises:

power output terminals with a power switch;

a synchronized pulse generator connected to said terminals that applies an alternating pulsed voltage synchronized to an incoming alternating current power source to the corresponding power outlet; and

a load sensor connected in series with said terminals and said power supply/clock generator; and

wherein said [[a]] microprocessor is connected to both said synchronized pulse generator and the load sensor, said microprocessor being adapted to determine if a current sensed by said load sensor resulted from both said switch being closed and application of the alternating pulsed voltage from said synchronized pulse generator.

n. Claim 36. (Currently amended) A network power manager apparatus of the type useable in a computer network having a host system with a network power manager application adapted to issue network commands and communicate network commands over a network communications connection supporting IP communications, the network power manager apparatus comprising in combination:

a power supply housing;

a power manager agent application mounted in the housing and being connectable to the network communications connection;

a plurality of power outlets mounted in the power supply housing; and

a plurality of intelligent power modules mounted in the power supply housing and connectable to said network communications connection and thereby being in IP communication with said network power manager application through said power manager agent application, each intelligent power module comprising a microprocessor, and each said intelligent power module being adapted to provide power from a power source to a corresponding power outlet among the plurality of power outlets and being in communication with said power manager agent application to provide power cycling on-off of said corresponding power outlet and at least one of power state sensing and load-sensing with respect to said corresponding power outlet in response to one or more commands, said power state sensor having a voltage state determination processor in voltage determination communication with a power relay in power controlling communication with said corresponding power outlet, said intelligent power module being in power state reporting communication with the network power manager application through said power manager agent application through one or more variables in a managed information base data construct communicated over the network communications connection in accordance with a predefined simple network management protocol.

REASONS FOR ALLOWANCE

5. The following is an examiner's statement of reasons for allowance:

None of the prior arts of record teach or suggest the claimed limitation with respect to an intelligent power module comprising a microprocessor connected by a power on/off device to independently control the power applied to said corresponding power outlet, and wherein said microprocessor is also connected by at least one among a voltage sensing device to independently sense the power state of said corresponding power outlet and a load sensing device to independently sense the load status of said corresponding power outlet along with other claim limitations. None of the prior arts of record teach or suggest the claimed limitations.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably


accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok B. Patel whose telephone number is (571) 272-3972. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abp


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